

## UNITED STATES PATENT AND TRADEMARK OFFICE



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/765,368	01/22/2001	Michio Ono	Q62757	8600	
7	590 09/13/2002				
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037			EXAMINER		
			WEINER, LAURA S		
			ART UNIT	PAPER NUMBER	
			1745		
			DATE MAILED: 09/13/2002	DATE MAILED: 09/13/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

			Me 3			
		Application No.	Applicant(s)			
Office Action Summary		09/765,368	ONO ET AL.			
	omec Action Gammary	Examiner	Art Unit			
	he MAU ING DATE of this communication	Laura S Weiner	1745			
Period for R	he MAILING DATE of this communication apeply	opears on the cover sheet wi	ith the correspondence address			
- Extension after SIX ( - If the peric - If NO peric - Failure to - Any reply i	TENED STATUTORY PERIOD FOR REP LING DATE OF THIS COMMUNICATION s of time may be available under the provisions of 37 CFR 1 6) MONTHS from the mailing date of this communication. od for reply specified above is less than thirty (30) days, a re od for reply is specified above, the maximum statutory period for reply will, by statureply within the set or extended period for reply will, by statureceived by the Office later than three months after the mailing lent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply within the statutory minimum of third d will apply and will expire SIX (6) MON	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication.			
1)⊠ R€	esponsive to communication(s) filed on 22	January 2001 .				
		his action is non-final.				
3)☐ Sii	nce this application is in condition for allow	/ance except for formal mat	ters, prosecution as to the merits is			
Disposition (	pace in accordance with the practice unde	r <i>Ex parte Quayle</i> , 1935 C.[	D. 11, 453 O.G. 213.			
	im(s) <u>1-14</u> is/are pending in the applicatio	n.				
4a) Of the above claim(s) is/are withdrawn from consideration.						
	5) Claim(s) is/are allowed.					
6)∐ Cla	6)☐ Claim(s) is/are rejected.					
7)∏ Clai	7) Claim(s) is/are objected to.					
8)⊠ Clai	im(s) <u>1-14</u> are subject to restriction and/or	election requirement.				
Application F						
	specification is objected to by the Examine					
	drawing(s) filed on is/are: a)□ acce					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.  12)☐ The oath or declaration is objected to by the Examiner.						
	r 35 U.S.C. §§ 119 and 120	aminer.				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
		a bassa bassa sa sa sa sa				
2.□	1. Certified copies of the priority documents have been received.					
	Certified copies of the priority documents have been received in Application No  Copies of the certified copies of the priority documents have been received in this National Stage					
* See th	ne attached detailed Office action for a list	reau (PCT Rule 17.2(a)). of the certified copies not re	eceived.			
14) ☐ Ackno	wledgment is made of a claim for domesti	c priority under 35 U.S.C. §	119(e) (to a provisional application).			
a) 🔲 🛚	The translation of the foreign language pro wledgment is made of a claim for domesti	visional application has bee	en received			
Attachment(s)		J	- ···			
2) 🔲 Notice of Dr	eferences Cited (PTO-892) aftsperson's Patent Drawing Review (PTO-948) Disclosure Statement(s) (PTO-1449) Paper No(s)	5)   Notice of Inf.	mmary (PTO-413) Paper No(s) ormal Patent Application (PTO-152) .			

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## **DETAILED ACTION**

## Election/Restriction

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-8, drawn to a polymerizable molten salt monomer, classified in class 546, subclass various.
  - II. Claims 9-11, drawn to an electrolyte composition, classified in class 252, subclass 62.2
  - III. Claims 12 and 14, drawn to an electrochemical cell, classified in class 429, subclass 317.
  - IV. Claim 13, drawn to a photoelectrochemical cell comprising a photosensitive layer containing a semiconductor sensitized with a dye, classified in class 204, subclass 242.
- 2. The inventions are distinct, each from the other because of the following reasons:

Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are not disclosed as capable of use together and have different modes of operations and different effects such that the photoelectrochemical cell of Invention IV requires a charge

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transferring layer and a photosensitive layer containing a semiconductor sensitized with dye which is not required in the electrochemical cell of Invention III.

- 3. Inventions I, II and III, IV are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as in a solar cell, a display, a capacitor, etc. and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
- 4. Inventions I and II, are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as in a liquid display device, a solar cell, a capacitor and the

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inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

- 5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 6. Claims 1-14 are generic to a plurality of disclosed patentably distinct species comprising an ionic liquid crystal monomer. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

The requirement may be met by applicant(s) electing an ultimate compound species of the ionic liquid crystal monomer from the enabled disclosure.

Applicant is advised that a response to this requirement to be complete must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election. 37 CFR 1.143.

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Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

- 7. A telephone call was not made to request an oral election to the above restriction requirement because of the complexity of the restriction and an election of a specie. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Weiner whose telephone number is (703) 308-4396. The examiner works a flexible schedule.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan, can be reached at (703) 308-2383. The fax phone number for non-after finals is 703-872-9310 and the fax phone number for after-finals is 703-872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Laura S. Weiner

Primary Examiner

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September 12, 2002